Connecticut River Pilot Core Team Meeting

US FWS Regional Office in Hadley, Massachusetts

April 29, 2016, 10:00 a.m. to 3:00 p.m.

Attendees (in person): Scott Schwenk, Ken Elowe, Catherine Doyle-Capitman, Renee Farnsworth, Dave Eisenhauer, Bridget Macdonald, Randy Dettmers, Bill DeLuca, Brad Compton, Patrick Comins, Andy Fisk, Kim Lutz, Mitch Hartley, Andy French, Andrew Milliken, BJ Richardson, Jeff Horan, Maritza Mallek, Nancy McGarigal

Attendees (on the phone): Bob Houston, Emily Preston, Jeremy Goetz, Will Duncan, Georgia Basso

Welcome

Ken Elowe: We had a great steering committee meeting in April. Some representatives from the Core Team group came and talked about the pilot. The members of the steering committee are really excited about this work. I really thought it was one of the best LCC meetings that we've had, and we tend to have really good ones. I want to thank you so much for your work to date, for joining us today, and for the feedback we anticipate receiving.

Communications Update (Dave, Bridget, Renee) *[Webinar Timestamp 6:15]*

This phase of our outreach focuses on a coordinated and consistent messaging campaign that focuses on the primary audience of implementers and stakeholders.

Bridget: The website is the hub for all audiences to find what they need. Implementers can go right to the data and tools page.

Renee walked us through the Connect the Connecticut (CtC) Spatial Data page on the North Atlantic LCC website. We have a new feature on the website that allows users to batch download multiple datasets at once, for those who know they want all or most of the spatial data layers of a certain type (e.g. aquatic spatial datasets).

The Testimonials section and the News & Information section of the website are where we're collecting stories about Connect the Connecticut and how they are being used.

Measuring success - intersection with communications: telling the story of implementation and/or use of the design to take specific conservation actions.

Bridget shared the story of how the town of Palmer, Massachusetts used the CtC design, including multiple layers in the design, to push over the edge a decade-long effort to acquire this parcel, which is part of a larger vision for a conservation unit in Palmer. The parcel is particularly important because it contains a headwater stream. Data from CtC was used to motivate acquisition, which has to happen through enabling legislation in the state legislature because it is currently owned by Massachusetts DOT. The legislation is in committee now and a hearing was held last week. It is expected to pass!

We passed out the report for team members to review.

Andy Fisk: The website is laid out really well and is nicely streamlined and easy to use.

Scott Schwenk: The last big piece to finish before we could roll this out more broadly was a guide to complement the website that explains what the project is, and what the process is. It fits between the one page fact sheet and the extensive and detailed technical documentation. This is a nearly final draft of the report. It was a lot of work but it was fun to work on. Thanks to Kim for your comments; we incorporated as many as we could. We think this is a tool that will be helpful for all of you. If you're reading it and something jumps out to you please let me know - there is still time to make some changes. That said, we're getting ready to finalize it, so if you have a comment please send it soon. It's not quite ready to distribute, but it should be ready to print in a few weeks. And I just want to recognize Maritza, who put a lot of work into this, Renee, who made maps along with Maritza, Nancy and Kevin, who gave us feedback multiple times as we revised the document - so I just want to recognize them. And the report is posted on the website for your review. It's not ready to distribute, but can be helpful for you now, and should be done in a matter of weeks.

Andrew Milliken: As per his usual approach, Scott is giving a lot of credit to others without giving himself any credit. He put a tremendous amount of work into this document. This is an amazing body of work and Scott was really the driver, so thanks Scott.

Outreach so far... *[Webinar timestamp 26:30]*

Andrew Milliken: The Steering Committee has really shifted a lot of our focus to science delivery. We're starting to do a lot more hands-on training. As we're doing that training we consistently use this project as an example of how you bring tools together to create an integrated conservation design. It's been really helpful as a teaching tool and has sparked interest in doing this kind of work in other places. It has also worked well as a pilot to inform our Regional Conservation Opportunity Area effort, which many of you are involved with.

Region 5 National Wildlife Refuge Biologists' Workshop (Jeff Horan)

> I work in the Division of Natural Resources, which coordinates biological work on refuges. All the biologists were brought together in March for a week of training. What we put together was a series of workshops called "Applying Landscape Tools to Refuges." Many are pretty isolated, and the biologists wanted to know more about how to apply these tools at the refuge level. What we focused on was how to use the tools, especially the IEI and the representative species models. We put together a framework on how those tools can inform planning efforts, especially, on refuges. Part of the refuge planning process identifies important species and habitats, so there is a pretty direct relationship between the tools, but what is added by the tools is an understanding of the larger neighborhood and regional

context. We definitely learned that you need to customize your science delivery to the users, and I think we can use this as a model for doing inreach to other groups.

Coordinated announcement (Dave Eisenhauer)

I'll be working on this with our communications subteam in the next month or two. We're ready now to get the word out about Connect the Connecticut. If anyone has any questions I can answer them.

Catherine Doyle: How will the report be distributed?

Dave Eisenhauer: We plan to make it available electronically, but will also print copies to distribute to partners and make available at training workshops. We're not planning a really large printing, but want to make it available to people in a way that best suits their need.

Emily Preston: Do you have a plan (or want to) on how to integrate this with the State Wildlife Action Plans? We need to think about the messaging about how this complements the SWAPs, especially since they differ in some ways.

Andrew Milliken: That's a great point, and I would like to have conversations with all four states about that. Clearly as we get further along with the RCOA process, we'll need to have those conversations. It would be great to talk with you more about your plans for outreaching your SWAP so that we can get the messages right. If you'd be willing to have that conversation it'd be a great starting point.

Emily Preston: I'd love to have that conversation, especially because we also are talking about the Conte CCP and another partnership whose plan is in revision right now. Fortunately, it turns out that most of the core areas across plans are overlapping.

Andrew Milliken: We'll take that away as an action item and be in touch.

Implementation and Validation Discussion (see website for supporting materials) *[Webinar timestamp 40:15]*

Andrew Milliken: We have a great product here, but it can be better and we want to improve it, so we need input and feedback from all of you.

Using the tools at the Silvio O. Conte National Fish and Wildlife Refuge I (Andy French)

Andy French: I want to preface my remarks by saying I'm about to give a vote of confidence, even if it doesn't sound like it. By the time this effort began, our conservation focus areas were done. We did them in what I call "the old-fashioned way." We worked with the states, our partners, conservation practitioners, and experts to identify important places for conservation within the Conte boundary. When we compared the old way and the new (CtC) way, there was probably a 75% overlap in what we identified. Where the two plans differed, it was often due to the fact that we identified places where we wanted to do restoration (these did not show up in the CtC design). So based on this experience I personally and professionally have a lot of confidence in this process as a conservation tool. With respect to implementation, we have recently been most focused on public outreach and work related to finalizing our CCP and associated EIS. I have been using the CtC data to support requests for support for Forest Legacy and other grants. I'm very excited about that. We plan to use it to make decisions between parcels. We can use it to apply for funding at the regional and national level. I think there's a real opportunity to use this to facilitate the connection between the data, our refuge, and local land trusts. After we finish our CCP, each conservation focus area will need a habitat management plan, and the CtC design will be very helpful in developing those plans.

Using the tools at the Silvio O. Conte National Fish and Wildlife Refuge II (Jeremy Goetz)

Jeremy Goetz: I'm the forester for the Nulhegan Basin Division of Conte Refuge. Let me start by saying I echo Andy. I'm grateful that the products largely match what we had put into the CCP - that was a big relief. I wanted to speak a little about applying these at a smaller spatial scale. The Nulhegan is about 27,000 acres. We've been focusing on using these tools to look at road-stream crossings in the division. *Jeremy reviewed the map document (see agenda page)*. So far the LCC tools have been very helpful in confirming where we've gone and done replacements, and that our prioritization scheme is solid. Where I want to go with these tools in the future is that we have our next set of identified crossings we want to replace. I plan to use the tools to show that the Nulhegan currently has high quality brook trout habitat, is predicted to have it in the future, and that by replacing these culverts we can keep these habitats in good shape - so I will use this to advocate for funding to complete this work. We've also done a lot of field survey work that we are sending back to the UMass team for incorporation into the tools.

Andrew Milliken: We're going to jump to validation now, because Randy needs to leave a little early today.

Model validation/evaluation project for Representative Species Landscape Capability Models (Randy Dettmers) [Slide available on agenda webpage]

We're working with the FWS Refuge Program, USGS, UMaine and West Virginia U to validate the LC models. Although the LC models measure much more than abundance, we're using a data-driven approach centered around point counts to partially evaluate the bird models. The basic idea is to work through the co-op units at the universities to evaluate bird count datasets throughout the region and look for relationships between occurrence, abundance, and the LC models produced by UMass. The map (see webpage) shows the point counts used so far, and they anticipate getting more from NY and MA, or any other partners that want to collaborate. The three objectives are to test relationships between abundance and species LC, evaluation the relationships between the predictions of the LC models and the species they represent, and provide information to managers on the relationships of forest bird species populations and forest structure/landscape conditions. Some species that they already have data for are blackburnian warbler, blackpoll warbler, Louisiana waterthrush, northern waterthrush, ovenbird, wood thrush, cerulean warbler, woodcock, and ruffed grouse (9 species). Depending on the data available, more species could be added. They also want to look at the relationship between these representative species and look at how well they actually represent suites of species. So again there will be an opportunity to look at some data and see how well those representative species actually represent the full suite of other species. And then at the end provide some information to managers about forest birds, forest structure, and landscape condition.

In the northern part of the region this is an outgrowth of a project we've been doing with the UMaine co-op unit to look at forest structure and relationships between different bird species in the northern forest working landscape and on our refuges in the northern forests. So these two projects are melding together very nicely. That's a quick update; we expect preliminary results this coming year.

Andrew Milliken: I'll add that I attended a presentation at NEAFWA on ruffed grouse and woodcock that looked at New England, and these models did well at predicting occurrence of these species (not abundance, but they aren't intended to).

Will Duncan: I wanted to let you know that I have to jump off, but this is really great stuff that I'm hearing, and I'm looking forward to catching up with those who already spoke soon.

Scott Schwenk: We are also doing a separate model evaluation exercise for Wood Thrush and American Black Duck, the former of which is relevant to the CtC. We convened a really great group of experts to look at the model at the regional scale and got some very useful feedback from the review. The Wood Thrush model seems to be working well in the watershed - where it seems off is happening elsewhere, such as in the Adirondacks.

Bill Deluca: It has been really great to go through this process and get feedback from species experts. So far the response has been mostly positive, and the constructive feedback has been useful.

Mitch Hartley: I think the outreach alone, and connecting Bill to people like the Atlantic Coast Joint Venture technical committee, is important. Doing this early introduction and input is really critical and I look forward to doing it with other species.

Randy Dettmers: It's really been great to get species experts together and get a qualitative review. With respect to wood thrush, there was a lot of positive feedback and people specifically identified areas where there were problems, which Bill can use to improve the model.

Jeff Horan: I wanted to add a comment that another thing we can work on is thinking about how to combine the information from multiple representative species models or to find a representative species for a particular focal species. I think it will be important to provide a framework for how to identify which representative species model to use. We went through an exercise where Blackwater NWR wanted to look at seaside sparrow, which doesn't have a model. First we looked at saltmarsh sparrow, and everything in Blackwater was low quality habitat - but then we realized that this was because saltmarsh sparrow uses short marsh. Seaside sparrow uses high marsh, which aligns much better with the habitat associated with northern waterthrush. So I think providing some guidance on what process to use to choose the right representative species model for a particular need is really important.

Update on how the Connecticut River Watershed Council is using the design (Andy Fisk)

Andy Fisk: I'm with the Connecticut River Watershed Council. So we are putting our toe in the water. We're backing it into our existing restoration projects and focusing on the aquatic elements. We're looking at the dam removal, culvert replacements, instream habitat restoration, and then riparian buffer work, most of which is happening in VT and NH, some in MA. We have used the CtC tools in grant applications for existing projects. So in one respect it's validation of 2 years worth of existing projects. It's been telling us what we've known from other tools - again, validating.

One question we have is that we use NFWF quite a bit and a number of our projects have been identified by the Eastern Brook Trout JV scoring methodologies. How will this influence/reinforce that funding? Another source we use is the mitigation and enhancement fund from the NH charitable foundation. They have a number of prioritization reports they've produced over the years. Some are outdated, even from their perspective. That's an opportunity to engage with the grant review team, which includes state biologists and stakeholders. There's an opportunity for a funder with a limited geography to the upper CT River to consider incorporating the design. I think for future projects we'll use the brook trout tools more. I think we need to have our staff spend more time exploring the tools.

Another way we've used this is with Partners for Fish and Wildlife and the Friends of Conte - we've engaged Partners largely through a series of questions, one of which is how can the Partners program support the Friends of Conte? We're very interested in fostering collaboration among the Friends (70 members), and to support them getting funded. So we reached out the Friends of the Conte and said, you know the Partners program - can you have them look at the design and tell us where you would find priority projects that can be implemented in the next 6-9 months - what's on the shelf and just needs funding - based on Tier 1 and Tier 2 cores. And we got a great response. No one came back and said "what, I can't use this thing." People went in, came back, and we got a great list. So I think that's an example of how it can be easily picked up.

That leads to some of the broader implementation questions. We're waiting to hear from regional staff and new Partners program staff - what do you think about projects in Tier 1 and Tier 2 areas? Can we use the Partners funding for that? Science to identify projects, and then help bring resources to those projects. From a Friends of Conte perspective, I think we're asking back to FWS - who owns this thing, now that it's done? How does that relate to funding decisions?

Andrew Milliken: NFWF is a Steering Committee member group and they are very interested in this work and linking this design to the New England Rivers and Forests program. It may be in a future RFP. We have done some training with NFWF staff and plan to do more. That's an action item for us, hopefully the next time you see the RFP we'll have built in references to the Connect the Connecticut. So if you are already referencing it, then the NFWF staff know what that means and hopefully will give it some value. In addition, the aquatic data are available on Data Basin and the North Atlantic LCC website. There is also a link to the Interactive Catchment Explorer, which may be useful if you want to access some of the brook trout data.

Scott Schwenk: Andy Fisk, if you have any specific suggestions of whom we could reach out to, who should know about these tools, so if people are using them the reviewers know what it is, we can work on that outreach.

Andy Fisk: Kevin Peterson, at the New Hampshire Charitable Foundation Mitigation and Enhancement Fund. There is a review panel for that fund that has state biologists and stakeholders on it. I would approach Kevin.

Andy French: An old saying is how do you want to get the attention of a refuge manager - you throw money at him! There are 70 members of Friends of the Conte Refuge in the watershed. As we look for ways to connect the Connecticut, when partners come in and want to make strategic linkages to places identified as important, if they are successful in their quest for grant funding, that's going to help us not just in the Connecticut, but elsewhere in the region. Anything we can do to make these grants more successful as a whole would have a positive cascading long term effect.

Andrew Milliken: Thank you Andy and Andy. Building off that discussion of grants and the Council, another application was through the successful RCP grant application to NRCS that Highstead, TNC, and many other partners put together. Bill Labich, Scott Schwenk, and others have been working on how to use this to prioritize spending the money that was received. Scott can provide an update on that.

Update on how the Long Island Sound RCPP grant implementation work uses the design (Scott Schwenk)

Scott Schwenk: I'm going to try and channel Bill Labich. This is a $10 million grant that covers nutrient and soil forest, non-industrial forest lands, and working forests. Bill has been leading the second component and I've been supporting that. It's tapping into a Healthy Forest Reserve Program that has been used elsewhere in the country for a long time but is relatively new to New England. The goal is to restore, enhance, and protect forest resources on private lands through permanent conservation easements. There are a couple ways the CtC tools are being incorporated. First, there is an eligibility criterion that uses habitat for five of the representative species from the CtC effort. Second, there is a ranking criterion that gives extra points if a location is within a terrestrial core or connector (or for being a State Wildlife Action Plan or state forest plan priority). The RFP launching the program is planned for May 23.

Andrew Milliken: With this grant, do we need to spend all of the money before applying again?

Andy Fisk: Some components are moving quickly, like the soils work, so in a couple of years we may want to apply again for funding. I think Bill is going to get a good response to his RFP for subprojects. There may also be state-level RCP grants that we could apply for.

Scott Schwenk: NRCS is pretty excited about seeing an application that includes a focus on the Health Forest Reserves program because it's sort of the first time. The feedback we're getting is that they've been really pleased with the way Bill and the team have set up the process and they feel like that can serve as a model to applying it elsewhere in New England. And then there may be opportunities to apply this in the watershed outside the RCPP.

[*Webinar timestamp 1:23:00*]

Implementing the LCD in Connecticut (Patrick Comins) [see agenda webpage for slides]

Patrick Comins: I want to talk about how we have used the products to evaluate projects and bolster grant applications, if you will. This was an inquiry I got from the Colchester Land Trust a few months ago. I'm not sure the size of the property -- I think two hundred acres -- but it's in Colchester Connecticut in the Eightmile River watershed. I don't know if you can see online my cursor, but the property is outlined in red here, and the conservation trust that owns the land contacted me and said: Is this property in one of your Forest Focal Areas or an Important Bird Area (IBA). It turns out it wasn't. They like to use those sorts of things to bolster their grant applications. They were applying to the Community Forest Program, which I think is through the US Forest Service. It turns out that it was in one of the Conte Conservation Focal Areas for the Eightmile River watershed, so we knew it probably had some ecological value. It wouldn't traditionally rank high because it's sort of this isolated parcel when you look at it in terms of land ownership -- there's a state forest property down to the southwest of it, there's a New England cottontail focal area to the east of it. So it misses, on the order of less than a mile from protected lands and from a New England cottontail focal area. It turns out it just misses one of our IBAs by about two thousand feet, an area that also happens to be one of our Audubon Forest Focal Areas as well.

So I started looking at these maps, and this opaque, light green here is our IBA boundary for the Lyme forest block. It turns out when I looked at landscape scale forests, I probably drew the boundary wrong for the IBA and missed this by about 2,000 feet, and this in a 30,000 acre block of forest. It's a very big IBA. We decided upon further inspection that this purple boundary probably makes more sense, just looking at where the 70 percent forest acres lay. It turns out some of my IBA Tech Committee Members didn't like the idea of just changing the boundary to accommodate a potential acquisition, so there was a lot of debate. And some very astute Technical Committee members said: Look, there is a subdivision between the property and this forest block, so your proposal doesn't make any sense. I said, But there is a corridor that is undeveloped that goes right from our IBA to this parcel and if you were walking through there, or if you were a bird, you would not know the difference between these two sites. So I provided a new boundary which excluded the subdivision, but that still wasn't good enough. We couldn't get this into our IBA. We really didn't have much to go on to say this is ecologically important. It turns out these little tweaks were not unique to this part of IBA. There were all these little tiny areas of forest where you would walk across the IBA line and you would not know a difference in the habitat type. And there were some areas within in the IBA that did not make a lot of sense because there was development within them. This is the entire forest block here, the Nehantic State Forest of Lyme, Colchester, and Salem, and you can see all those orange areas are proposed changes. There's actually an exclusion zone in the southern portion, and some areas I had proposed we include. I suspect in the end, that those tweaks will go into effect, but they didn't want to change it on short notice just because of an acquisition opportunity.

So I got the bright idea: Why don't you go into the LCC Databasin and see what that shows in terms of where this property lies. It turns out it didn't lie within a Tier 2 Core Area. So traditionally you would look at this and say: IT's an isolated property, it's not abut any protected lands, probably a low priority. But when you look at it, it really is ecologically connected to important areas to the south, and really this got it better than our IBA or Forest Focal Area analysis, and it did identify this block that was at least a buffer or a second tier core area forest. So we were able to put it in the application, and I have not heard yet if they were successful, but having looked at their application I think they have a really good chance. If it doesn't go through this round, it would rank highly in future opportunities as well.

Some other ideas I have for how we are going to use this: Right now we are reviewing Connecticut's draft green plan, which will guide acquisition opportunities over the next ten years. So far it's an excellent plan and they have a lot of great tools for evaluation a property to see if it makes ecological sense to protect or to fund the protection of. One thing it's missing is mentioning the LCD. So I made that suggestion that they add to their green plan as another reference.

Another area where we are using this: Audubon CT is a partner with USACE in Connecticut for something called the In Lieu Fee Program. ACE and others are not a big fan of piecemeal mitigation approaches. So if a developer builds a highway through an important wetland, you get on-site mitigation that's a little pond in a cloverleaf that ends up being filled with Phragmites. It doesn't always being successful. So what they have done in a lot of states is move toward In Lieu Fee Program where instead of doing on-site mitigation, you pay into a program and a third party aggregates monies and puts them toward projects that are going to have a real ecological impact. Of course we only have the design for the Connecticut River watershed, we wish we had it statewide, but we are applying it as a criteria: If you in a Tier 1 or Tier 2 or even the Tier 3 build out to the road, that gives you extra points, in addition to being within IBA boundaries, Forest Focal areas, etc. So this is something we are using right now. I was just corresponding with Anthony Zemba about this, and we only have one proposal in the Connecticut River watershed remaining, the protection of a property in Salem that falls within a Tier 1 core, and it's going to rank high. I think we're going to have funding released to protect that property. We had another proposal for a dam removal project, and we just learned that they are removing their application, which is unfortunate because it ranked high in aquatic resources. But we are looking forward to an expansion of this project, hoping it will be statewide by the next round of our grant funding.

Finally, with regard to refinements, one thing we are talking about in CT is refining our Breeding Bird Atlas. The state wants to do this and Dr. Elphick at UConn is very interested. One trick thing is they need about $50,000/year from non-governmental entities to implement this as match, and they are looking to Audubon to raise the money, so we'll see how that goes. It's not my decision, but in any case, when we do the Atlas, it will involve a lot of modeling and we want to have a predictive map of where we would expect to find wood thrush, etc, and then go out and ground truth that. UConn will build those models based on surrounding states' breeding bird information -- Rhode Island, Massachusetts, New York -- and also tools like the LCC's Landscape Capability models. The idea is we will have the models, will compare them against existing ones, and then we are going to go out there in future years and groundtruth them. So this will be useful in terms of identifying areas where we want to groundtruth our species of conservation concern for our Breeding Bird Atlas. Secondly, we hope the updates to our Atlas will help to refine these species models.

Jeff Horan: Are you looking at one recommended approach to use with your partners, or are you thinking about the toolbox to meet different criteria?

Patrick Comins: We're using the toolbox. No one tool gets it perfect. It's a matter of an additive process where you get points for being in different tiers. Of course if you're in an IBA and Tier 1, you get extra points.

BJ Richardson: I was wondering if you asked people to submit why something was a Tier 1 core, for example.

Patrick Comins: We did. It was a pretty quick review. I took a look at a few of our high priority species and was able to give them a list of the species I though would be on the property, and suggested they put it into the grant application. In the past I would have done it much more heuristically, so this is much more defensible product. And this is actually just one example. There have been a few other examples - Haddam Land trust in Connecticut applied for a grant from Open Space, and there was another one in Connecticut. So we've been able to use the other species models already too.

Update on the Regional Conservation Opportunity Areas (RCOAs) project (Andrew Milliken)

> **Andrew Milliken:** I'll review the RCOA process next, unless there are additional implementation examples people want to bring up. So I will say there is a reason we called this the Pilot, which is that we planned to follow it with a regional design. We have been building on work the states began to pool information across all the states. Using the Connecticut as a pilot was intended to be a model for a design in another large watershed, as well as a process model for a regional design, which is underway and called Regional Conservation Opportunity Areas (RCOAs). That name comes from SWAP terminology that means specific important areas for species of greatest conservation need. We're hoping to have a version 1.0 of this effort by July. We were able to move relatively quickly due to the work done on the pilot. So our 18-month journey had a huge benefit for leading to a speedy regional design - so thank you!
>
> The main change that is happening is that there was a lot of interest in building on the aquatic core area idea that was developed here. There are 20+ partners working on the aquatic component of the design. We anticipate coming out with core areas, connectors, restoration approaches based on Huc12 watersheds, explicit consideration of marsh migration, and a way

to address the RSGCN, rarer species, that aren't covered by the LC models. The bottom line is that the CtC work has made the regional design possible, and that work may generate ideas and refinements that can be applied to the CtC. So hopefully it's a two-way cycle.

Scott Schwenk: I think the terrestrial cores will be very similar but not exactly the same. So we'll have to figure out how to message that. They have pretty much accepted things like using the Huc 6 watersheds to stratify, let's take the top 25% of the landscape, let's merge IEI and resilience, etc. Some differences are being incorporated that will lead to small differences in the core areas.

Andrew Milliken: Emily, do you have any comments on the RCOA process?

Emily Preston: I haven't been directly involved; I've been keeping track from Katie Callahan. It's been a long process because it began while SWAPs were being revised, so people weren't available then. It will be interesting to see the results, since I still think there's a lot of rumor and conjecture that won't be settled until we see some maps.

Andrew Milliken: That was clearly a lesson-learned from this project, that people need to see the results to finalize decisions.

Emily Preston: There was a steep learning curve for those who aren't familiar with the datasets.

Andrew Milliken: And then another part is how the state COAs match, or don't, to the final regional design. The intent is that regionally important areas that might not emerge from a state-level analysis will come to the fore, but information at the state level that is important will still be recognized.

Emily Preston: Like all the products, we have to be clear about when is the right time to use which dataset.

Andrew Milliken: UMass and TNC are really playing key leadership roles in the RCOA process.

Kim Lutz: It sounds like the RCOA and CtC process are merging. Is there a plan to update the CtC layers based on RCOA decisions?

Andrew Milliken: The vision for the region is a regional LCD that can be used down to HUC6 level, and be a starting point for collaborative LCDs at other scales. Because the CT already has a design, we may ask that same question, but we may not need to change our design. This group should review the RCOA results, but are not obligated to adopt any methods. The groups are responsible for taking ownership of the designs. I don't expect the regional partnerships like this one or Chesapeake Bay to just take the RCOA results and clip them out. The first step is to see how things line up.

The one other thing I'll add is that the National Wildlife Refuge System has a policy in place to require LCDs before doing planning or acquisition. They are very interested in the RCOA process and the Connect the Connecticut in particular. The national folks are very impressed with our efforts here.

Time for lunch! ***Webinar resumes at 1:55:30***

Andrew Milliken: Any post-lunch thoughts about additional needs or interests in validation or implementation that people want to bring up? I want to just mention that feedback includes concerns. That's an important part of feedback. If you don't feel comfortable today, get in touch later. I'll give you an example to inspire you.

Our fisheries program has been involved as part of the aquatics team, as well as folks from ecological services (Dave Perkins, John Warner). They have been talking to their colleagues and received a combination of positive feedback and concerns. And use as an example of the importance of getting this feedback. On the positive side, they've been impressed with the collaboration, the ease of accessing the data, the quantitative approach, the incorporation of climate change, and the tools around headwaters.

They also brought up some concerns. One is the dam/culvert impacts layers. They look at connectivity and ecological integrity and try to prioritize dams or culverts based on the change in connectivity predicted from restoring flows. The terminology used (high medium and low impact) happens to be the same as that used by FERC to evaluate dams. So a low impact dam for FERC and a low impact score on the dam impact tool do not mean the same thing, but that's not clear. Another thing is that they wanted to make sure these tools were not misused or overused. For example, they shouldn't be used in isolation. Also, using IEI to prioritize connectivity improvements makes a lot of sense in headwaters, but breaks down somewhat in the mainstem. For example, removing the Holyoke Dam doesn't increase IEI, but that's a very important dam as far as its impact of migratory fish. So to address this in part we just use terminology - we are changing the word "impact" to "effect." They also are fine with the limitations as described in the technical documentation, but wanted that to be more obvious so that people don't try to use these tools without knowing all the details. I think that's reasonable.

In terms of missing dams, it turns out that another LCC-supported project, with Hurricane Sandy funds, has Erik Martin from TNC as a PI. He's working with the states to review the dams database. We're hoping that will identify any missing dams, and then we'll update the map, so that issue will take care of itself.

The issue about using IEI on mainstems vs. tributaries may be a communication issue. Using that tool to make a decision about the Holyoke Dam isn't appropriate, and we need to make that more clear. One thing we've looked at is how the South Atlantic LCC posts its known issues and limitations high up on Data Basin.

Patrick Comins: Does it give the impression that it's already an impacted area, and it gives the impression that taking out a dam wouldn't have a big effect?

Brad Compton: The connectivity model used in these tools look only at local connectivity, so they don't consider anadromous fish - it's just not how it was designed to work. As far as dams data go, the database is really bad. Often they're in the wrong place and the information that is there is inaccurate. It will take a while to fix that up. Erik Martin is doing a lot to improve it.

Andrew Milliken: The RCOA aquatic team is looking into other datasets. The challenge is to find regionally consistent data. In the meantime names and clear information about limitations and use are our action items.

Patrick Comins: One request - would it be possible to download some of the shapefiles in google earth as well?

BJ Richardson: We are trying to focus on using Data Basin as a free tool for partners. There are some space limitations but it is free to upload a fair amount of data.

Renee Farnsworth: I am available to train folks how to upload their data to Data Basin.

Brad Compton: We really like getting feedback. Positive feedback makes us feel like we're making a difference and negative feedback, we can often do something about.

Kim Lutz: People often forget to give feedback. People have good intentions but sharing good stuff is often the last thing people take time for. I wonder if there are forums we attend where we could take responsibility to ask people for feedback. I can ask for feedback as a standing question at Friends of the Conte steering committee meetings.

Future Action Items *[Webinar timestamp: 2:16:30]*

Nancy McGarigal: We want to talk about future plans. Kim is going to talk about potential future workshops. I'd like to round up the afternoon by talking about how to manage this team going forward. People value getting together, but we haven't really charted a long-range future. Those of us in the Service would like to share the leadership roles into the future. In terms of one potential, with the effort of rolling it out to more communities, we may want to do additional workshops. Bill Labich may host a workshop at his annual RCP workshop - this would be a huge audience and a great venue for us. Scott and I presented at this annual workshop a couple of years ago to give a presentation on the project when we were still early in the process. People were interested but wanted to see it when complete. So that will be another workshop that we could participate in to export the design. We've also been talking with Kim about a separate workshop with the Friends group members and their partners.

Kim Lutz: The largest contingent of the Friends group work on land acquisition - over 50% of the membership focuses on that. With our new strategic plan we want to offer training and education opportunities to members. This seems like a perfect training opportunity. We voted to host a training as a coalition. Not just for the Friends, but we want to engage the land trust community as well. We'll have to think about how it dovetails with Bill's efforts, since there are 7 RCPs in the basin. But we do want it to be bigger than just the Friends of Conte, though we would organize it and recruit people. I think the stories we heard today about implementation will motivate people to attend. I think this basin is big enough that a northern meeting and a southern meeting might make the most sense. Am I correct that if we do the planning the LCC will do the instructing? We don't have the technical expertise to do anything but have people show up, but we're happy to do that.

Andrew Milliken: I had a meeting with Bill a couple days ago and he presented some analytics from workshops. He found that if there is not a hands-on component to training, then people don't retain very much. So that limits the size unless we do breakouts. So north and south separate makes a lot of sense, and a full day is probably a good idea.

Renee Farnsworth: I completely agree that a full day is the way to go. Since hands-on is so important, having 2 workshops is probably better. In the fall I won't be able to participate, so we'll need to keep an eye on who will be around and available to serve as TAs, essentially.

Andrew Milliken: We also talked about targeting the future trainers. If there are people who could go to another meeting and train others, they should be a focus. Maybe part of the thinking about designing a workshop is to prepare people to train others.

Renee Farnsworth: Maybe as part of the inviting process we could get information about what kinds of projects people are working on - something to make it really relevant and help guide the hands-on piece so we're not making stuff up or being narrow in our worldview.

Nancy McGarigal: One of the most effective parts of the refuge biologist workshop was tailoring it to their data and tools.

Kim Lutz: Yes, this makes me think we want to use some sort of survey to find out who to target, especially with the land trusts, so we message it right and get the right people to sign up. I think we could handle the logistics, if that would be helpful.

Maritza Mallek: Since we want people to use their own computers, what we need for a workshop is a room with tables, lots of outlets, and good internet.

Nancy McGarigal: Definitely that part, and scoping out what people's interests are.

Jeff Horan: We did run into an issue at our workshop where the maps wouldn't load because too many people were trying to access data on the same server. So we need to test out how many people can access the data on the network.

Maritza Mallek: Data Basin shouldn't have the same issues as the FWS regional office server, since it's set up to handle lots of requests at once. However, the local internet speeds at the training session will have a big impact on the user experience.

Renee Farnsworth: I think 30 people is a good max. One thing we have seen is that it doesn't work that well with Internet Explorer - some people only have that. We haven't had problems in the past with Data Basin getting slow. And maybe breakouts make sense for specific second exercises.

BJ Richardson: Another question is do we still do a workshop at the RCP gathering in November?

Scott Schwenk: The RCPPs go beyond the CT watershed, so we're also thinking about reviewing the RCOA process. So that is still an ongoing conversation.

Nancy McGarigal: And another compromise is to do a session and not a workshop at the RCP gathering. It takes a while to coordinate something like that. We were talking about September. Maybe we need more time.

Kim Lutz: We can do more scoping and refine a date in the future.

Andy French: The Conte final CCP will come out September-ish, which will impact some of the people in the room. So this workshop seems better suited for October 2016.

Maritza Mallek: One option would be to have the first meeting in October, up north and then do the second meeting in conjunction with the RCP gathering in November.

Scott Schwenk: I just want to thank you Kim for facilitating because I think this could be really valuable and critical.

Nancy McGarigal: When you think about additional audiences, this workshop will expand to more practitioners. Are there other workshops or events that you know where we'll be exporting this information to others?

Dave Eisenhauer: Nothing springs to mind, but I think it's something our outreach team will be looking at. Events like the CT River cleanup will present opportunities to talk about the design and tools.

Jeff Horan: So what do we do as members? I am a local conservation commission chair. There's a Massachusetts association of conservation commissions workshop. It's already built - you just show up and talk. If we are all disciples in some way, and someone goes to Corinth, and someone goes someplace else. It would be helpful if we individually consider our roles in this mission. We should coordinate some big workshops to keep it moving, but local workshops in between to talk to a local land trust are opportunities to seize upon.

Dave Eisenhauer: I think the communications subteam should compile a list of opportunities. We have great ideas in the sessions but it's hard to coordinate them later.

Andy French: As we're moving forward with this, I think getting a tab on the website to get feedback on how it's working, now would be a good time to do the refinements. I don't know what's involved in making refinements, but if we could get real feedback from the people trying to work with it, it would make the workshops a lot better I think.

Nancy McGarigal: The last topic is the future of this team and potential changes in roles. I think this has been a great meeting. We have a new project it sounds like, to conduct some workshops in the fall. Do you want to continue to have regular meetings? Will we share responsibility on hosting them? Was today's meeting valuable? I could see something similar in another 6 months. Sometimes face-to-face meetings are better than online-only communications. Any thoughts?

Mitch Hartley: I think I know the answer to this question. As some of these things get revised, validated, and modified, are we revisiting any layers in the future? If so, it seems like a good role of this group to weigh in. Some changes to the input layers might not make a big difference to the cores, so maybe we don't generate a new map. In another case it might be important. But it's not clear whether generating a new design is on the table.

Nancy McGarigal: Andrew alluded to it. We may revisit it after the RCOA process is finished early next year..

Kim Lutz: I think there's a purpose to meet, but it's not clear what that purpose will be, and that purpose might change. I don't feel the need to have a regular schedule. We could meet when we have a decision to make on a more ad-hoc basis.

Andrew Milliken: The point in time when we can review the Version 1, the CCP has been released, and the workshops have been held, after that we can review everything. So sometime around next January would make sense. We won't know until we get closer. I hope the Friends will continue to play an active role, as a partnership that has a stake in this geography. I don't know what that means, but as long as it's a regular thing that you talk about. We work in other geographies, like Gulf of Maine or the Chesapeake, because there are partners there already working together who are asking now for technical assistance to do LCD.

Andy Fisk: I second the way Kim is thinking, as far as reconvening. Andrew, what you just indicated are a fair number of things that drive a very useful meeting. I think it makes a lot of sense for the Friends of Conte to stay close to the question. I think this question was at the end of the last meeting. I think continuing to drop this product into the CCP implementation makes a lot of sense. Is there an implicit question or decision from the LCC? I think part of what we're all realizing is that wow, this wasn't a 6-month project, and you're taking on more of these. So it would be helpful for us to know what the LCC can do. You may not know that at this point.

Andrew: For the LCC in general, the LCC has to be all of the partners and their networks. It can't always go back to LCC staff. So if we're successful that means that people are taking ownership and helping deliver data and tools in their geographies. We can't support 8 LCDs like the CT river and the region as a whole. We've certainly had conversations with FWS staff about what taking ownership looks like. So we're continuing to figure it out, but networks will be critical. You happen to be in our home geography and that helps.

Nancy McGarigal: So to summarize, the next trigger for a meeting would be after the RCOA process has completed a proposed regional design framework and after we have have completed the Conte CCP as well. It'll probably be post-CTC fall workshops. Andrew suggested possibly January 2017. I encourage everyone on the core team to keep coordinating with one another about implementation, and to provide us feedback when there are questions or concerns . So with that, I asked Catherine if she could spend a few minutes talking about her research.

Summary of Doctoral Work on landscape conservation designs (Catherine Doyle-Capitman) [Webinar timestamp 2:52:20]

I am working on a project to determine what role social science can have to promote implementation, buy-in, and ownership of LCD visions. I'm starting scoping interviews with a range of large landscape initiatives. My research has to be approved by OMB, which takes 6 months - I'm in the middle of that. The process of my research will involve three case studies, one of which is you guys. I'm also looking at one around Chicago on monarch conservation, and one in the CA Central Valley. It'll be a mixed methods study. This process is fascinating to watch. And I've been asking myself how social data could help change this design. So the role I play is emergent because I'm still learning about this process. In the future I'll be conducting semi-structured interviews and surveys. All my findings will be integrated into a practitioner's guide on the process of landscape conservation design. One thing I'm struggling with right now is what kinds of social data practitioners are interested in - what kinds of questions would you like to have answered? If anyone would be willing to talk with me I'd very much appreciate it.

Mitch Hartley: I think it's an overarching issue. We represent a diversity of conservation interests. I would really like to know...the 25% top level is fairly foundational. Is there consensus on whether that's too much or too little by social status. How does that number hit people?

Jeff Horan: In addition to private landowners, I think it's important to talk to local governments. I would also be interested in the demographics and how that changes, especially with respect to socioeconomic differences.

Catherine Doyle-Capitman: That's a great point. I've been talking with people in Chicago about planting milkweed in open space, and there are communities where sightlines are important and people are uncomfortable with the idea of tall grasses.

Scott Schwenk: I don't know how we'd incorporate all other interests. But I can see how it would be valuable for us to incorporate plans for future highway and development - to see potential conflicts, as you were saying. Getting access to that kind of information would be really helpful.

Catherine Doyle-Capitman: I think there's an opportunity to guide future prioritization based on social values. That's a great example of where we want to prioritize to areas where there is a high potential for success now and in the future.

Nancy McGarigal: I want to recap what's happening in the next 8 months. The RCOA effort is going forward. We'll be doing a dual workshop in the fall hosted by the Friends. Outreach and communications will continue.

Andrew Milliken: Starting with Emily we'll think about communications with states on SWAPS, the CT design, and the regional RCOA design. I will follow up with NFWF about embedding CtC info in the next round of?. [a few other things that I hope Andrew will fill in]

Scott Schwenk: Dave you mentioned a more formal announcement, but when is that?

Dave Eisenhauer: Ordinarily this would be done at the front end. Because this has been out there it's a way to tie it up and communicate in a coordinated way. I was envisioning a press release that we would develop and share. More social media than general media. It's a way for us all to jointly communicate the availability of the design. And give a little bit more of a bump. Let people know where we are and where we're going. I was planning to circle back with the comm subteam. I am thinking sometime in May.

Nancy McGarigal: And if you hear about more forums where we should talk about the design, please let us know.

Andy Fisk: You guys have been very admirable in how you approached this project. I know you are doing a lot of work and I know you are looking now for us to us to lean in. Don't forget "Valley Gives" campaign on Tuesday, May 3rd. Remember your river.

Summary of Action Items Identified:

1. Core team members should provide Scott Schwenk feedback on the *Connect the Connecticut* report handed out at the meeting. He is working towards finalizing it within a month.
2. Dave Eisenhauer will coordinate CtC public roll-out with media and will distribute communications materials to core team members on May 17 or 18th. Members should distribute to their respective organizations and partners.
3. Andrew Milliken to meet with State contacts to discuss complementarity of the CtC design and products, with State WAPs, and relationship with RCOA process.
4. Mitch to facilitate a meeting with Bill DeLuca, Scott and Andrew with ACJV technical committee to discuss CtC and RCOA effort.
5. We should develop guidance on what process to use to choose the right representative species model for a particular need.
6. Andrew Milliken to network with NFWF staff, notably grant administrators, to possibly build in references to the CtC in RFPs.
7. Andy Fisk recommends that Andrew M or Scott reach out to Kevin Peterson, at the New Hampshire Charitable Foundation Mitigation and Enhancement Fund, about the CtC effort. This is perhaps another opportunity to build in references to the CtC in RFPs. The review panel for that fund that has state biologists and stakeholders on it.
8. Andrew M, Scott, and BJ Richardson to explore Patrick Comin's request to be able to download some of the shapefiles in Google Earth as well, or make it easy for him to put his KMLs into DataBasin.
9. Kim Lutz to solicit feedback on the CtC products and design at Friends of Conte meetings. She will pass on to Andrew M and Scott. She also asks for others to seek opportunities from a broader audience of implementers whether they have feedback from their experiences in using products/design.
10. Kim will coordinate with Friends of Conte to host a hands-on workshop for members and partners on the CtC design and products. She will discuss this with Bill Labich to see how to

complement the November 2016 RCP workshop and what might be offered there. There is interest in these being hands-on workshops, using local data. Access to computers and fast internet will be important. The Conte CCP ROD should be out in October, so workshop can address complementarity there.

11. We should consider getting a presentation on CtC on agenda of annual Massachusetts association of conservation commissions and State land trust workshops. Jeff Horan is a key contact for conservation commissions and Scott Jackson often presents related tools at the MA land trust conference.
12. Andrew French suggests we have a tab on the CtC website to solicit comments and feedback.
13. Nancy will work with NALCC and Friends to coordinate next CtC core team meeting sometime early in the new year (possibly January 2017) after the Friends and RCP workshops are completed, and the RCOA process/design first draft is completed.